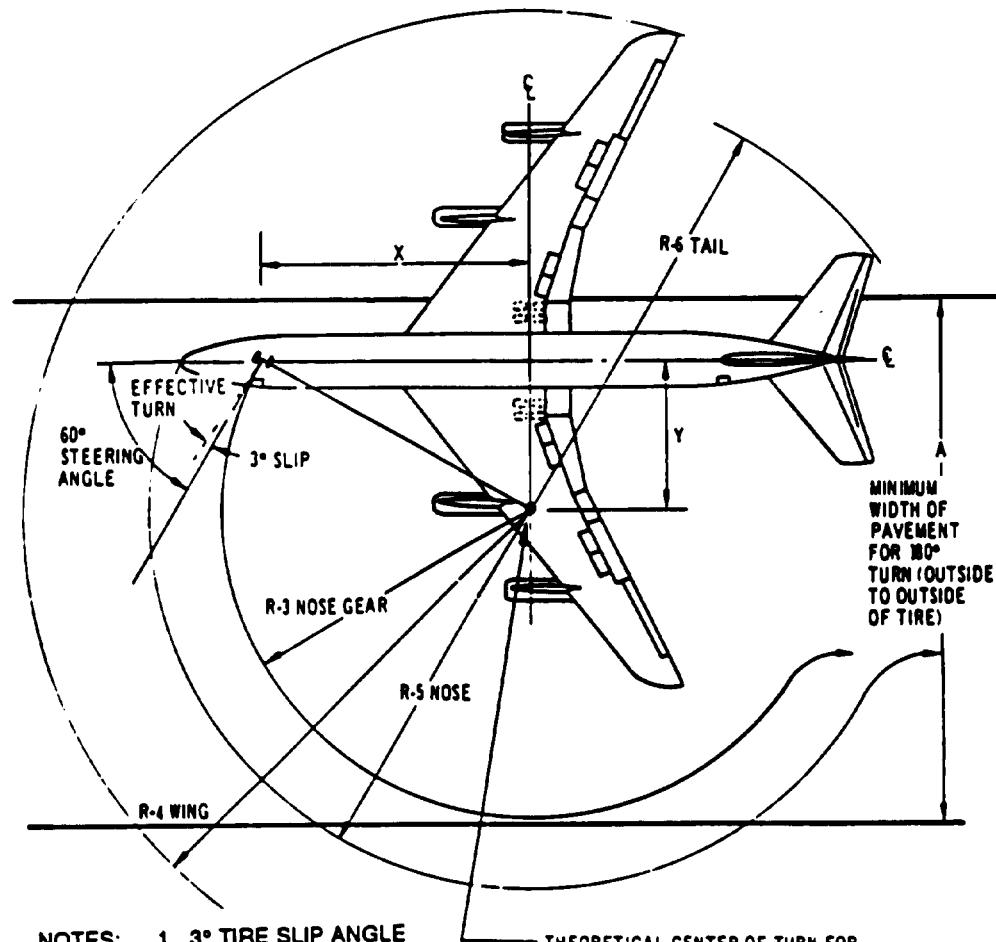


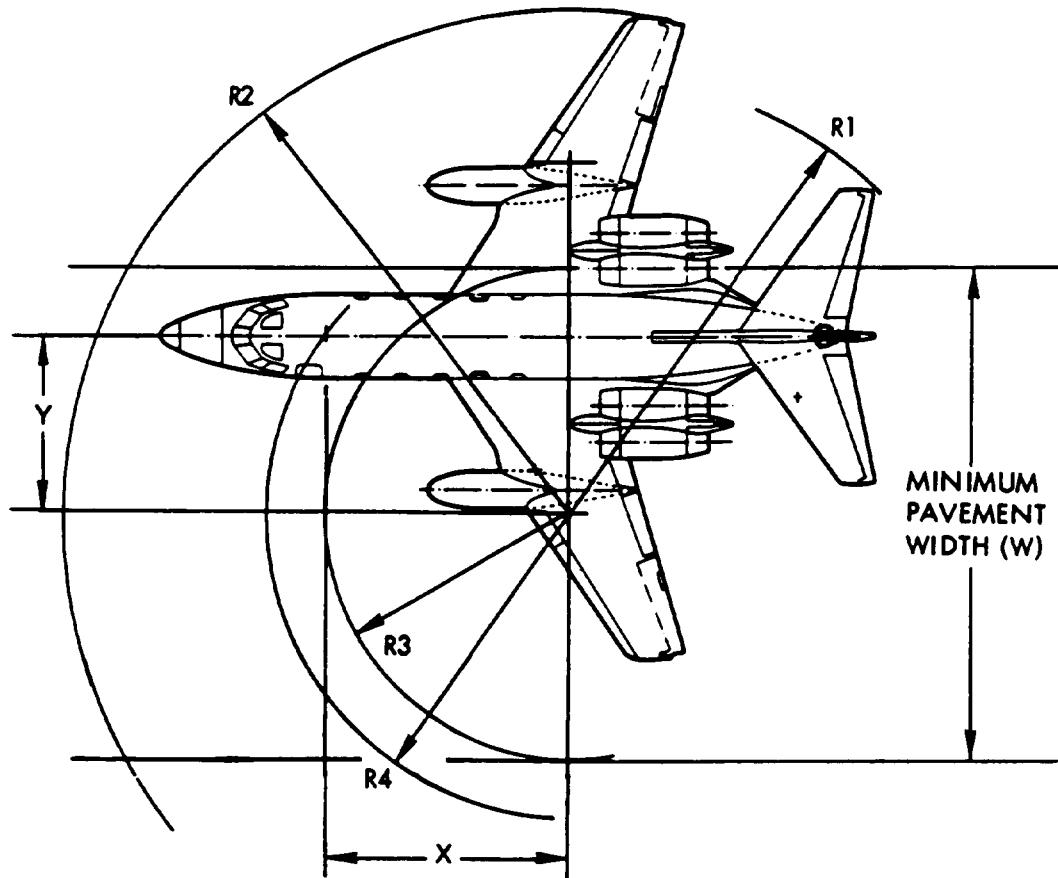
STEERING ANGLE (DEGREES)	R-1	R-2	R-3	R-4	R-5	R-6
	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	91	113	118	179	127	147
35	74	96	103	161	114	132
40	60	82	92	147	104	121
45	48	70	84	136	97	112
50	39	61	77	127	91	106
55	30	52	71	119	87	100
60 (MAXIMUM)	23	45	68	112	84	96

Figure D-16. C-137C, Turning Radii – No Slip Angle



FOR EFFECTIVE TURN ANGLE OF 57°						
X	Y	A	R-3	R-4	R-5	R-6
59.0	38.3	123.4	70.5	116.0	85.5	98.0

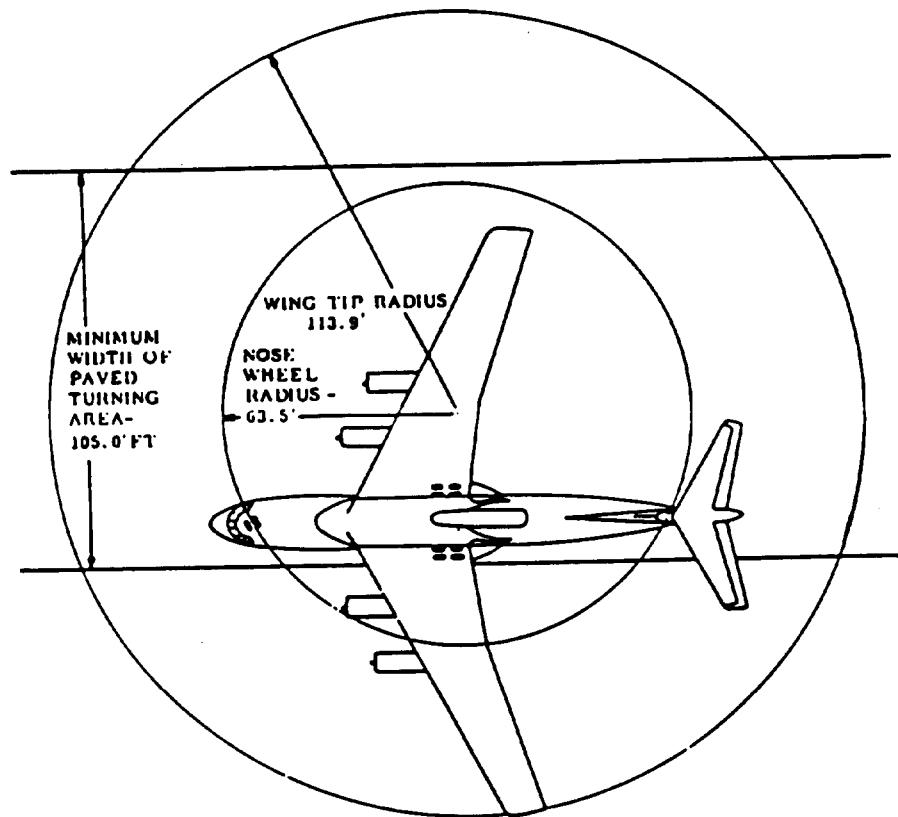
Figure D-17. C-137C, Minimum Turning Radii – 3° Slip Angle



TURN ANGLE	X	Y	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	W
53°	20.6	15.5	37.1	43.3	21.8	25.8	34.0

NOTE: DIMENSIONS ARE IN FEET.

Figure D-18. C-140A/B, Minimum Turning Radii

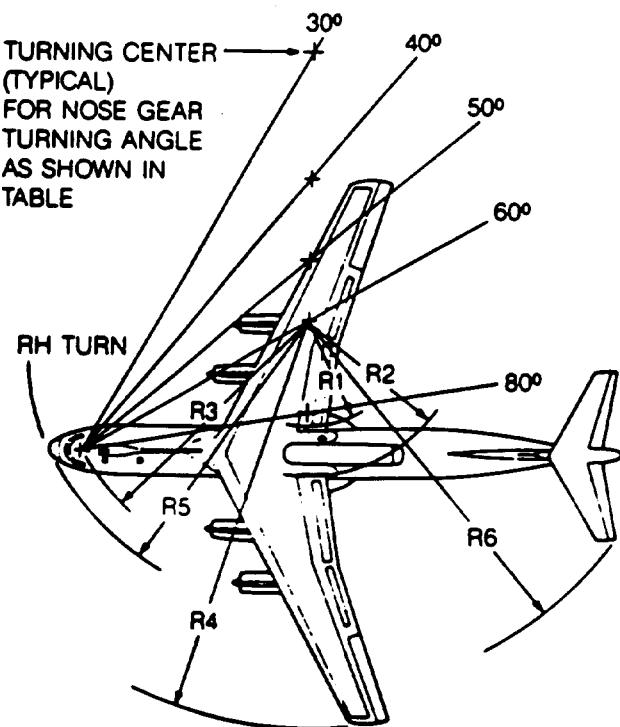


NOSE GEAR TURN IN DEGREES	WING TIP RADIUS, FEET	NOSE WHEEL RADIUS, FEET	WING TIP GROWTH,* FEET
5	708.0	631.1	0.3
10	362.8	319.8	0.6
15	261.1	212.8	0.9
20	222.2	180.8	1.0
25	190.2	150.2	1.3
30	176.7	110.0	1.4
35	160.1	96.9	1.5
40	147.2	85.6	1.7
45	136.0	77.8	1.8
50	126.1	71.8	1.9
55	120.5	67.2	2.0
60 (MAXIMUM)	113.9	63.5	2.2

\*OUTBOARD WING TIP ON SWEPTWING AIRCRAFT "GROW" IN TURNS. WHENEVER A MINIMUM OF 10 FEET WING TIP CLEARANCE IS NOT ASSURED DURING TURNS, REFER TO WING TIP GROWTH TABLE.

Figure D-19. C-141A, Turning Radii

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STEERING ANGLE (DEGREES)	W*	R 1	R 2	R 3	R 4	R 5	R 6
	FEET						
30	270	104	126	133	197	140	167
35	233	84	106	116	178	123	150
40	204	68	90	103	160	111	138
45	182	56	77	94	148	102	129
50	164	45	66	86	137	95	121
55	150	36	57	81	128	90	115
60**	137	28	49	77	120	86	110
75.3***	108	7	28	69	100	81	100
80	101	1	22	67	94	79	98

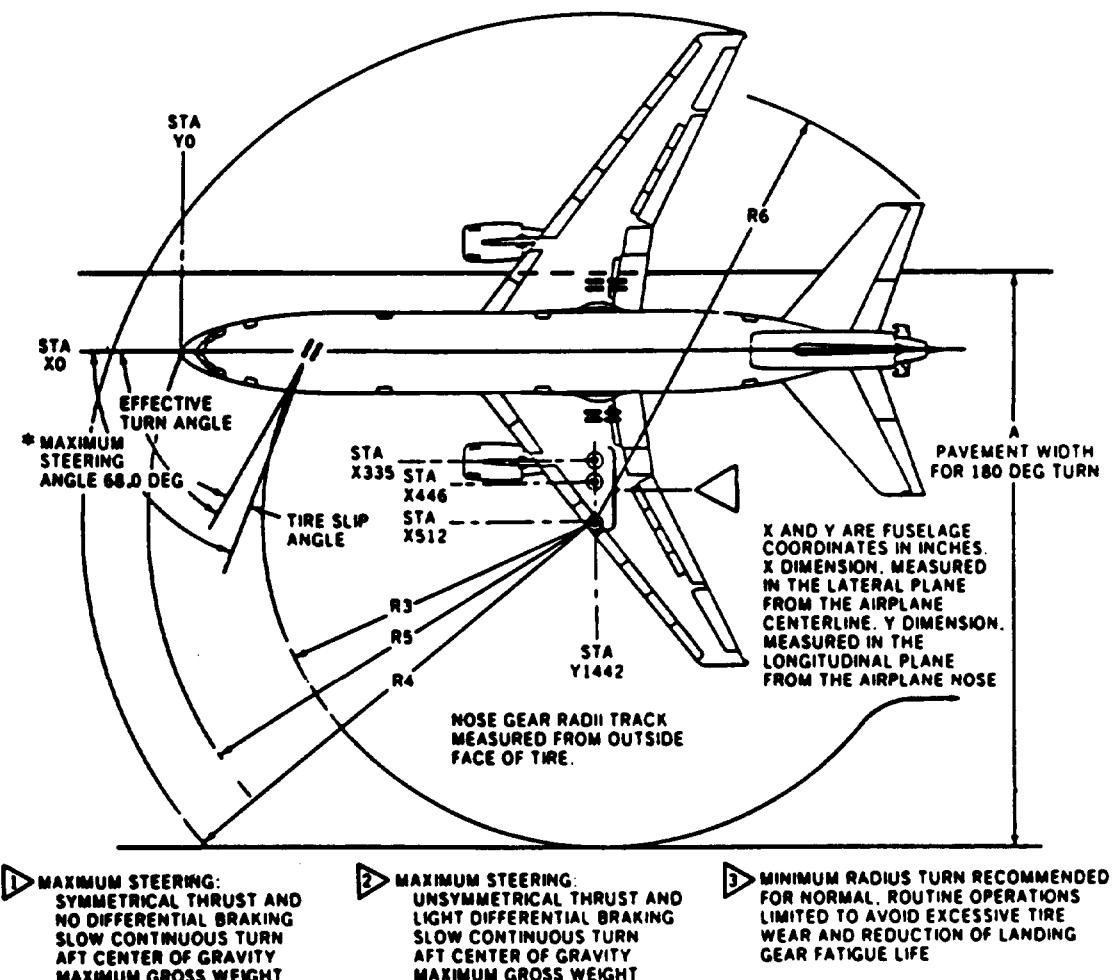
\* = MINIMUM PAVEMENT WIDTH FOR 180° TURN.

\*\* = MAXIMUM STEERING ANGLE ON AIRCRAFT.

\*\*\* = HORIZONTAL STABILIZER TIP RADIUS EQUAL TO WING TIP RADIUS.

- NOTES:
1. ACTUAL OPERATING DATA MAY BE GREATER THAN VALUES SHOWN SINCE TIRE SLIP-PAGE IS NOT CONSIDERED IN THESE CALCULATIONS.
  2. TO ACHIEVE STEERING ANGLES GREATER THAN 60 DEGREES, THE NOSE WHEEL STEERING SCISSORS MUST BE DISCONNECTED.

Figure D-20. C-141B, Turning Radii – No Slip Angle



TYPE OF TURN	EFFECTIVE TURN ANGLE* (DEGREES)	TIKE SLIP ANGLE* (DEGREES)	X INCHES	Y INCHES	A FEET	R3 FEET	R4 FEET	R5 FEET	R6 FEET
1	62.8	5.1	446	1,442	141.4	83.5	125.3	107.5	105.9
2	68.0	1.1	335	1,442	128.5	79.8	116.1	104.7	99.5
3	-	-	512	1,442	149.8	85.2	130.5	108.8	109.8

\*ANGLE MEASURED RELATIVE TO GROUND

Figure D-21. KC-10A, Minimum Taxing Radii

X TURN RADIUS (FEET)	RADIUS (FEET)										Z [3] MINIMUM WIDTH FOR 180° TURN (FEET)	
	A WING TIP		B [3] NOSE GEAR		C [3] WING GEAR		D TAIL TIP		E NOSE			
	[1]	[2]	[1]	[2]	[1]	[2]	[1]	[2]	[1]	[2]		
0	113	115	86	81	23	21	126	130	110	106	100	102
20	131	133	98	94	42	41	132	138	111	106	131	125
40	149	151	98	92	62	61	142	146	116	112	158	153
60	168	170	108	102	82	81	163	166	125	121	188	183
80	186	187	118	115	102	101	187	170	136	132	220	216
100	205	206	133	130	121	121	181	184	149	146	254	251
120	223	226	149	146	141	141	187	200	163	160	290	287
140	244	245	166	163	161	161	213	216	178	175	327	324
160	264	266	183	181	181	181	230	232	196	192	364	362

- [1] BODY GEAR STEERING INOPERATIVE
- [2] WITH BODY GEAR STEERING
- [3] MEASURED TO OUTSIDE TIRE FACES
- [4] WITH BODY GEAR OPERATING, TURN CENTER PASSES THROUGH WING LANDING GEAR.  
WITH BODY GEAR NOT OPERATING, TURN CENTER PASSES APPROXIMATELY HALFWAY BETWEEN WING GEAR AND BODY GEAR.

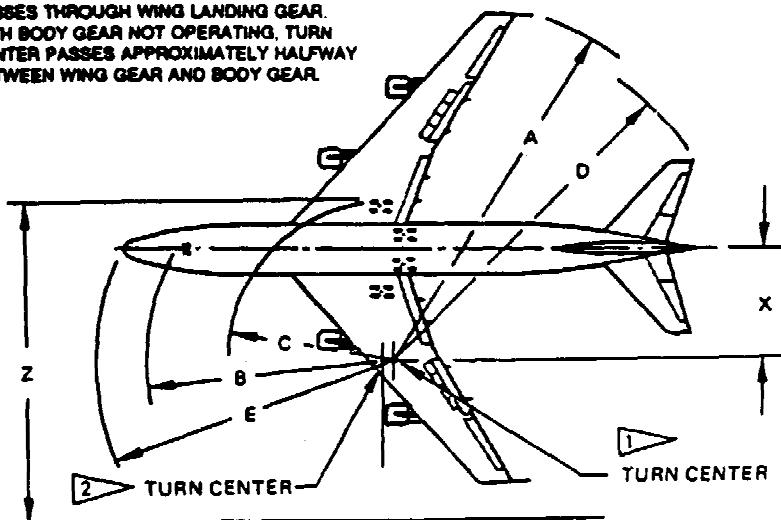
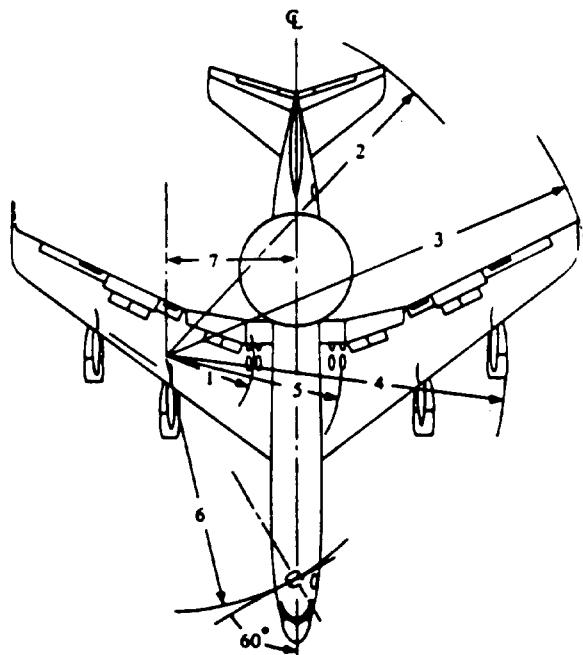


Figure D-22. VC-25A, Turning Radii



ALL DIMENSIONS ARE APPROXIMATE AND ARE  
BASED ON MAXIMUM STEERING ANGLE OF 60°.

1. LH MAIN WHEEL . . . . .	23 FEET
2. STABILIZER TIP . . . . .	94 FEET
3. WING TIP (ANTENNA) . . . . .	115 FEET
4. JET ENGINE . . . . .	89 FEET
5. RH MAIN WHEEL . . . . .	46 FEET
6. NOSE WHEEL . . . . .	66 FEET
7. PIVOT POINT . . . . .	34 FEET

NOTE: MINIMUM PAVEMENT WIDTH  
FOR 180° TURN - 120 FEET.

Figure D-23. E-3A/B/C, Minimum  
Turning Radii

X TURN RADIUS (FEET)	RADIUS (FEET)										Z [3] MINIMUM WIDTH FOR 180° TURN (FEET)
	A WING TIP		B [3] NOSE GEAR		C [3] WING GEAR		D TAIL TIP		E NOSE		
	[4]	[1]	[2]	[1]	[2]	[1]	[2]	[1]	[2]	[1]	[2]
0	113	115	86	81	23	21	125	130	110	105	109
20	131	133	89	84	42	41	132	136	111	106	131
40	149	151	96	92	62	61	142	146	116	112	158
60	168	170	106	102	82	81	153	156	125	121	188
80	186	187	118	115	102	101	167	170	136	132	220
100	205	206	133	130	121	121	181	184	149	146	254
120	225	226	149	146	141	141	197	200	163	160	290
140	244	245	166	163	161	161	213	216	178	175	327
160	264	265	183	181	181	181	230	232	195	192	364
											362

[1] BODY GEAR STEERING INOPERATIVE

[2] WITH BODY GEAR STEERING

[3] MEASURED TO OUTSIDE TIRE FACES

[4] WITH BODY GEAR OPERATING, TURN CENTER PASSES THROUGH WING LANDING GEAR.  
WITH BODY GEAR NOT OPERATING, TURN CENTER PASSES APPROXIMATELY HALFWAY BETWEEN WING GEAR AND BODY GEAR.

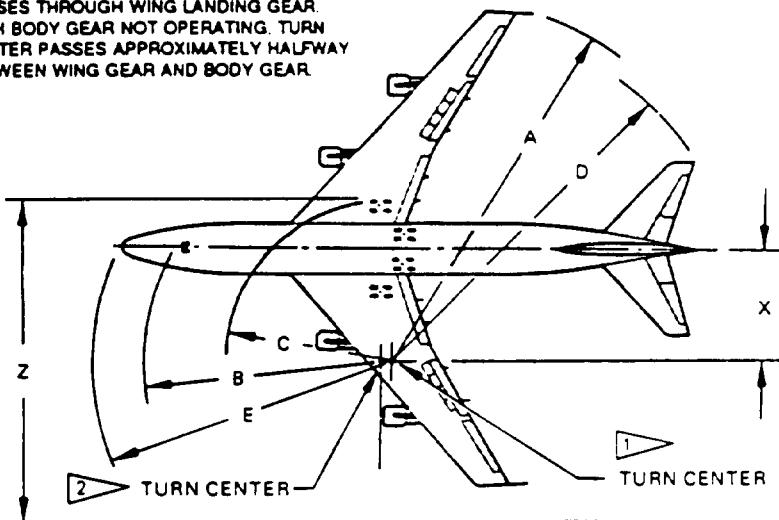
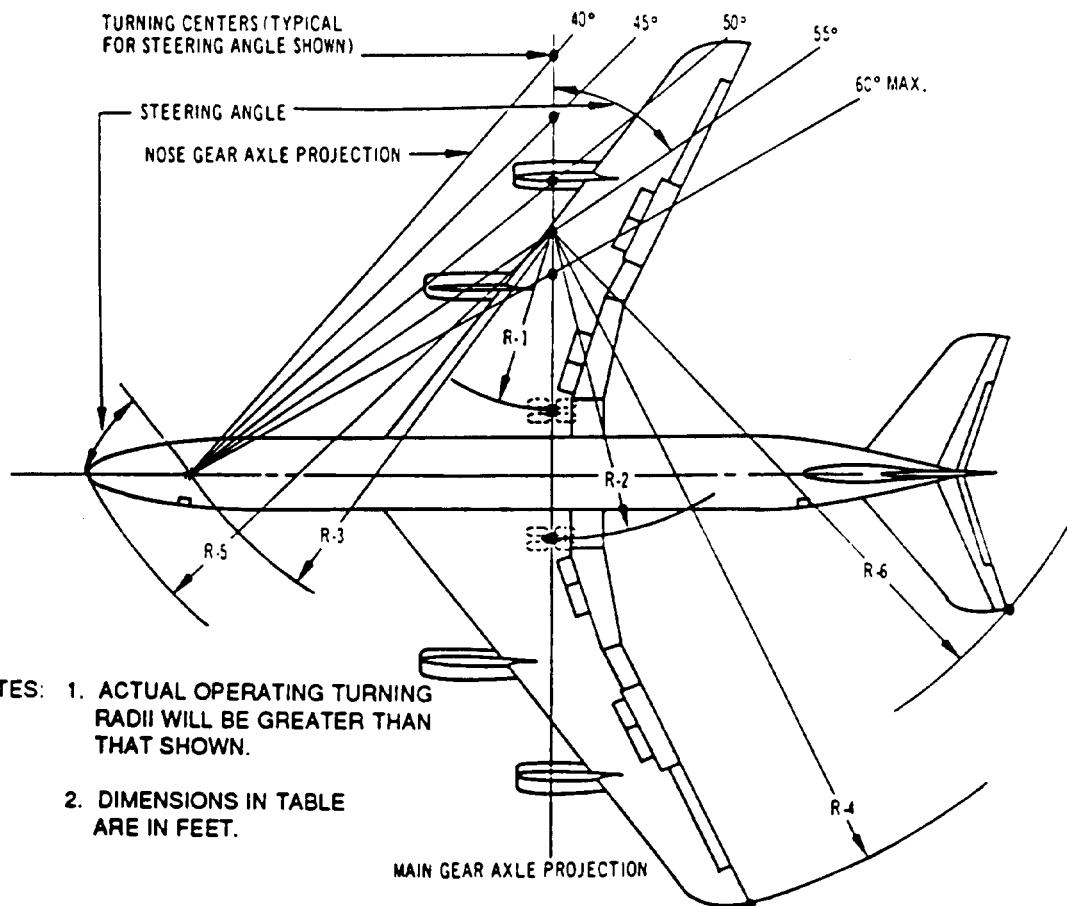
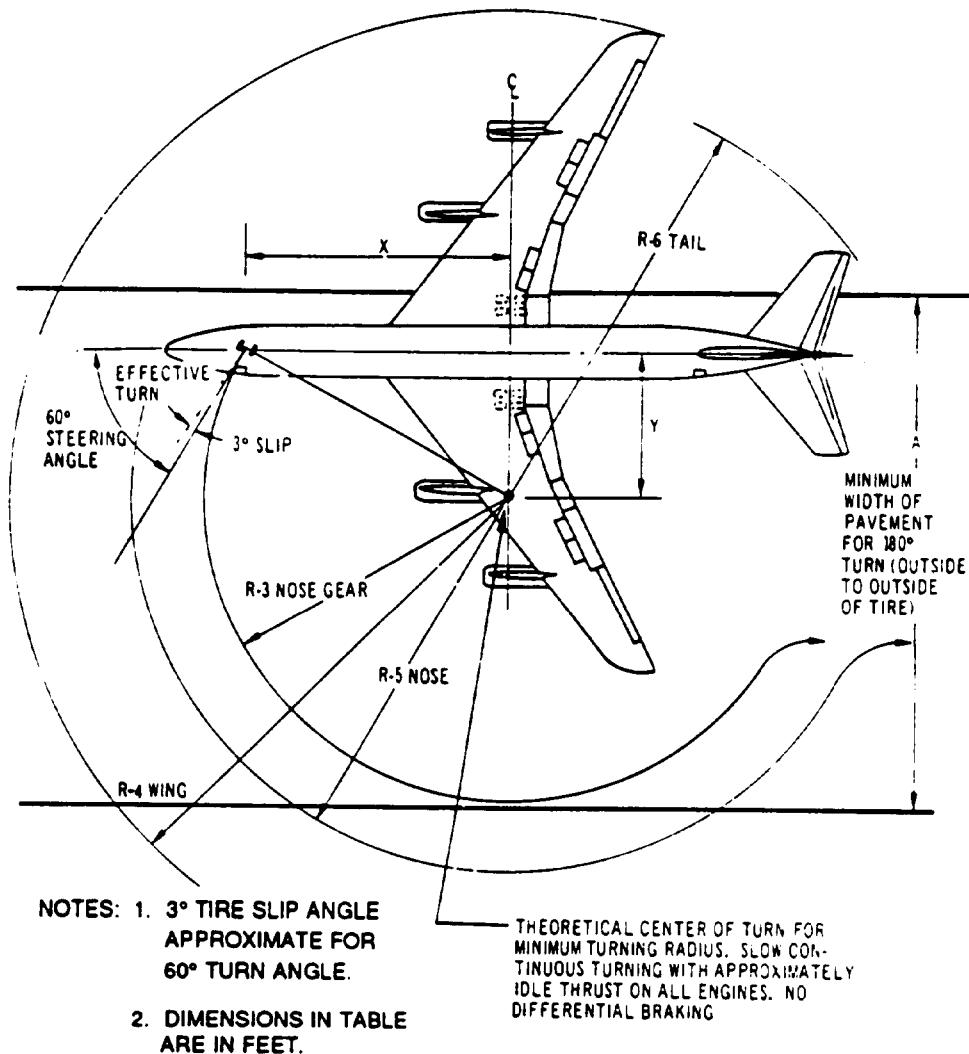


Figure D-24. E-4A/B, Turning Radii



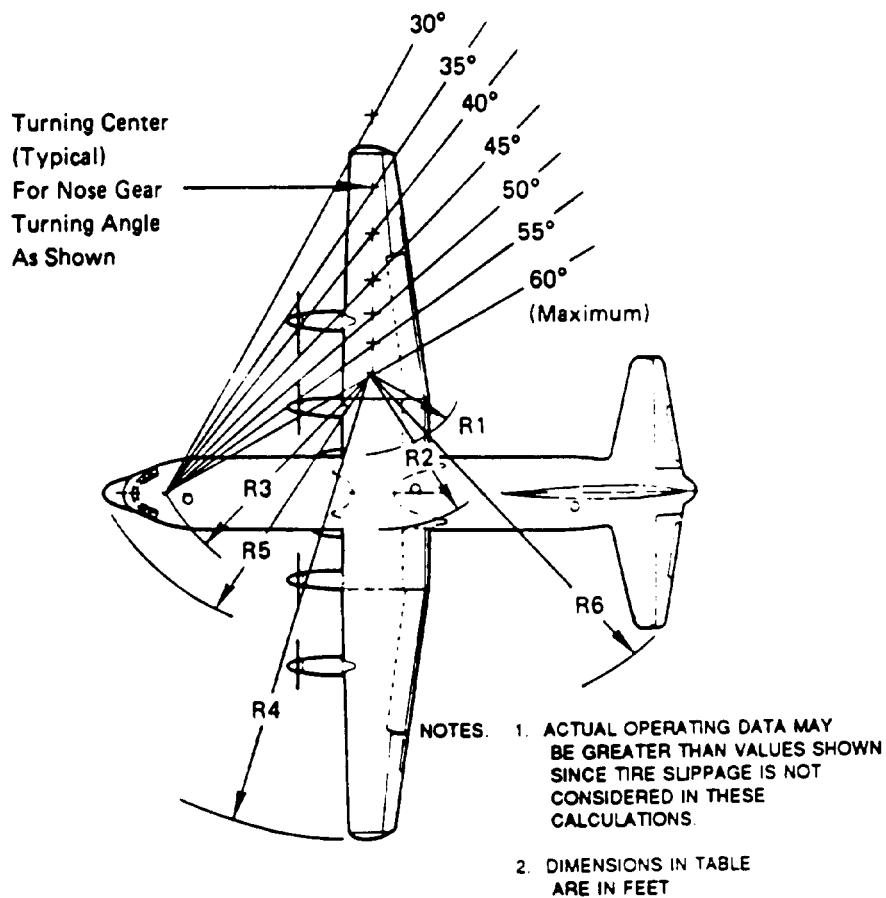
STEERING ANGLE (DEGREES)	R-1	R-2	R-3	R-4	R-5	R-6
	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	91	113	118	178	127	147
35	74	96	103	161	114	132
40	60	82	92	147	104	121
45	48	70	84	136	97	112
50	39	61	77	127	91	106
55	30	52	71	119	87	100
60 (MAXIMUM)	23	45	68	112	84	96

Figure D-25. EC-18B, Turning Radii - No Slip Angle



FOR AN EFFECTIVE TURN ANGLE OF 57°						
X	Y	A	R-3	R-4	R-5	R-6
59.0	38.3	123.4	70.5	116.0	85.5	98.0

Figure D-26. EC-18B, Minimum Turning Radii – 3° Slip Angle

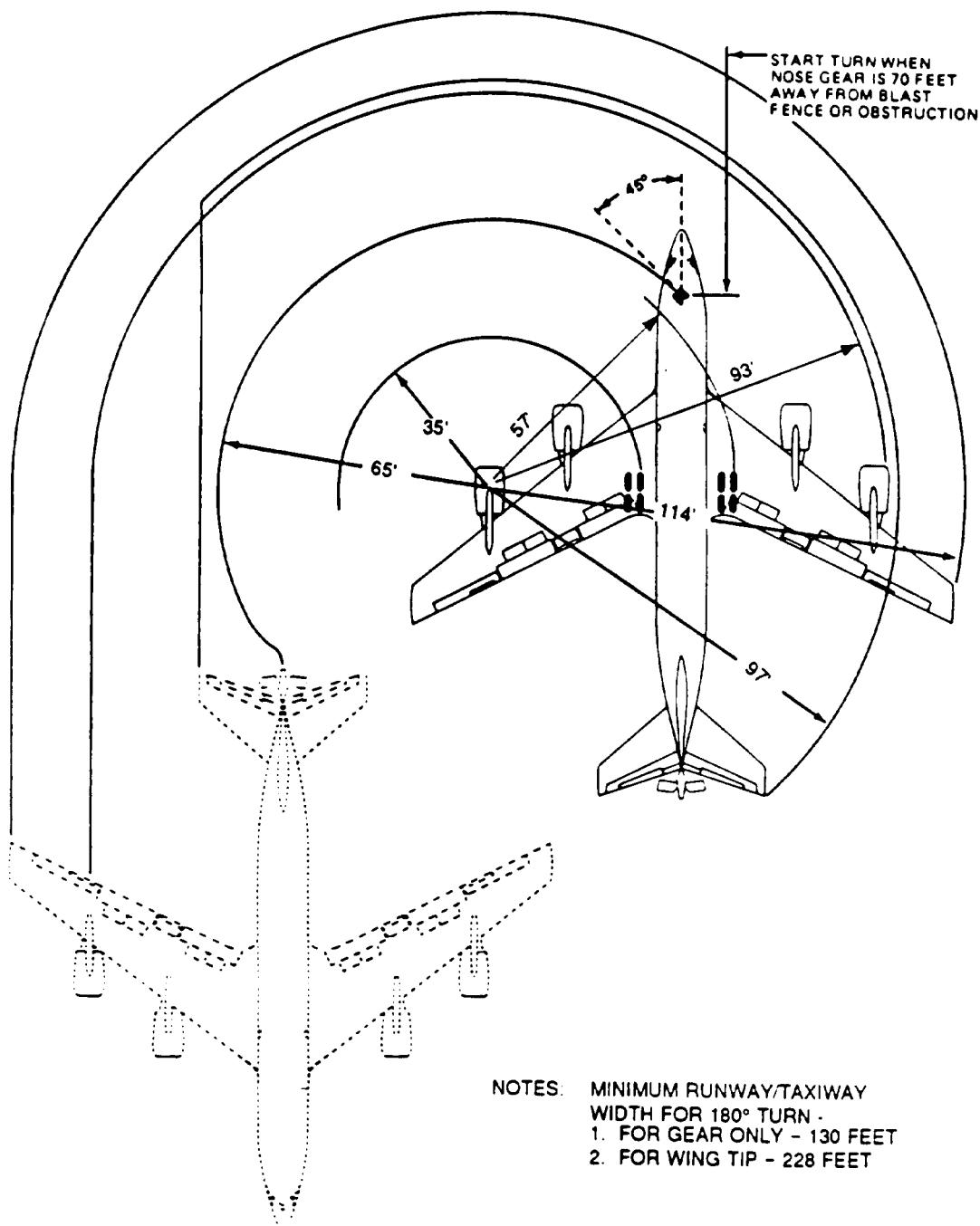


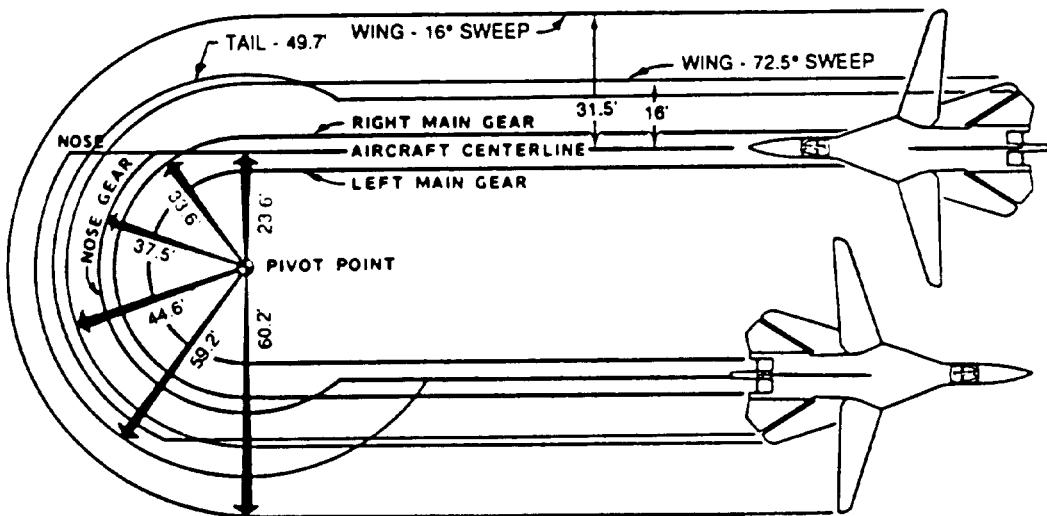
STEERING ANGLE (DEGREES)	W*	R1	R2	R3	R4	R5	R6
	PVT. WIDTH	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	158	63	77	81	136	88	111
35	136	51	65	71	124	78	100
40	108	41	56	63	114	71	92
45	105	33	48	57	107	66	86
50	94	27	41	53	101	62	81
55	85	21	35	50	95	59	77
60 (MAXIMUM)	77	16	30	47	90	57	74

\*W = MINIMUM PAVEMENT WIDTH FOR 180° TURN

Figure D-27. EC-130E/H, MC-130E/H, and WC-130E/H,  
Turning Radii – No Tire Slippage

Figure D-28. EC-135A/C/E/G/H/J/K/L/P/Y, RC-135M/S/U/V/W,  
and WC-135B, Minimum Turning Radii

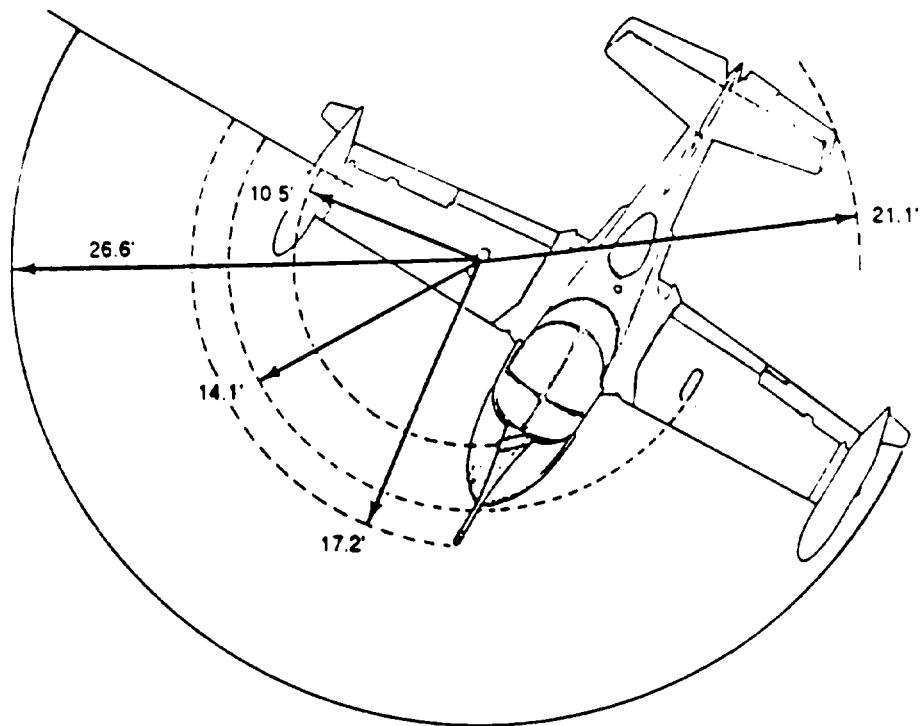




- NOTES:
1. PIVOT POINT BASED ON 40 DEGREES NOSE WHEEL STEERING.
  2. TURNING DISTANCES ARE BASED ON MINIMUM TAXI SPEED OF 5 KNOTS.

Figure D-29. EF-111A, Minimum Taxi Turn Radii

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NOTE: TURNING RADII ARE DETERMINED WITH USE  
OF NOSEWHEEL STEERING AND BRAKES.

Figure D-30. OA-37B, Minimum Turning Radii

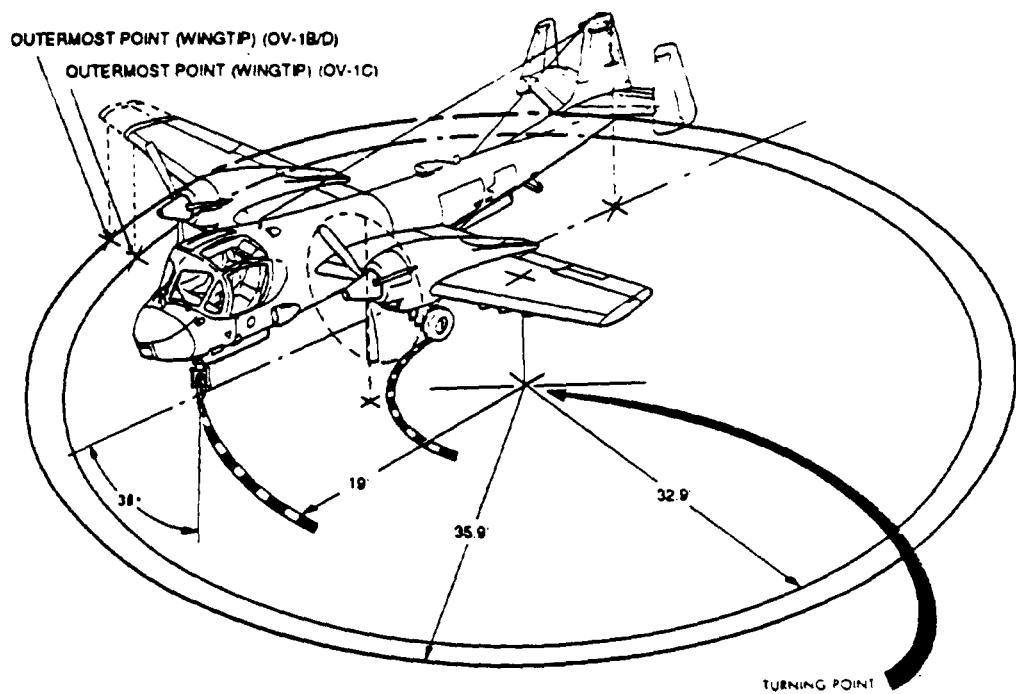
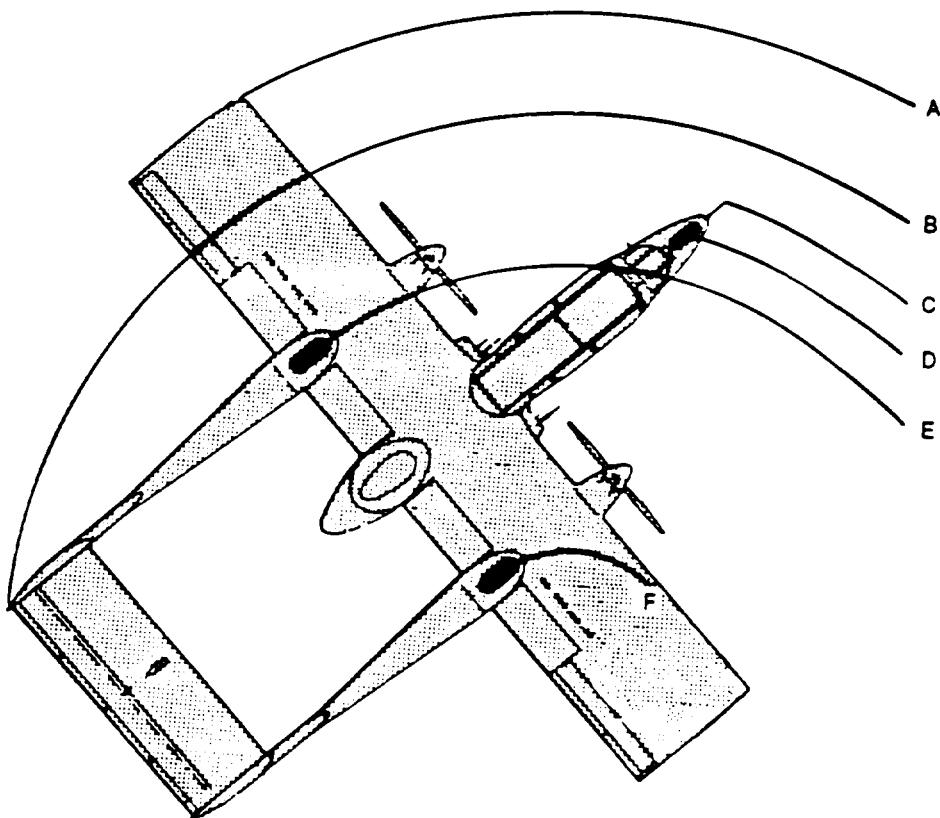


Figure D-31. OV-1B/G/D, Minimum Taxi Turn Radii



NOTE: TURN RADII BASED ON SPEED OF 3 KNOTS

- A - WING TIP - 33.2 FEET
- B - VERTICAL STABILIZER - 28.6 FEET
- C - PITOT BOOM - 25.8 FEET
- D - NOSE WHEEL - 22.7 FEET
- E - LEFT MAIN WHEEL - 20.6 FEET
- F - RIGHT MAIN WHEEL - 5.6 FEET

Figure D-32. OV-10A, Minimum Taxi Turn Radii

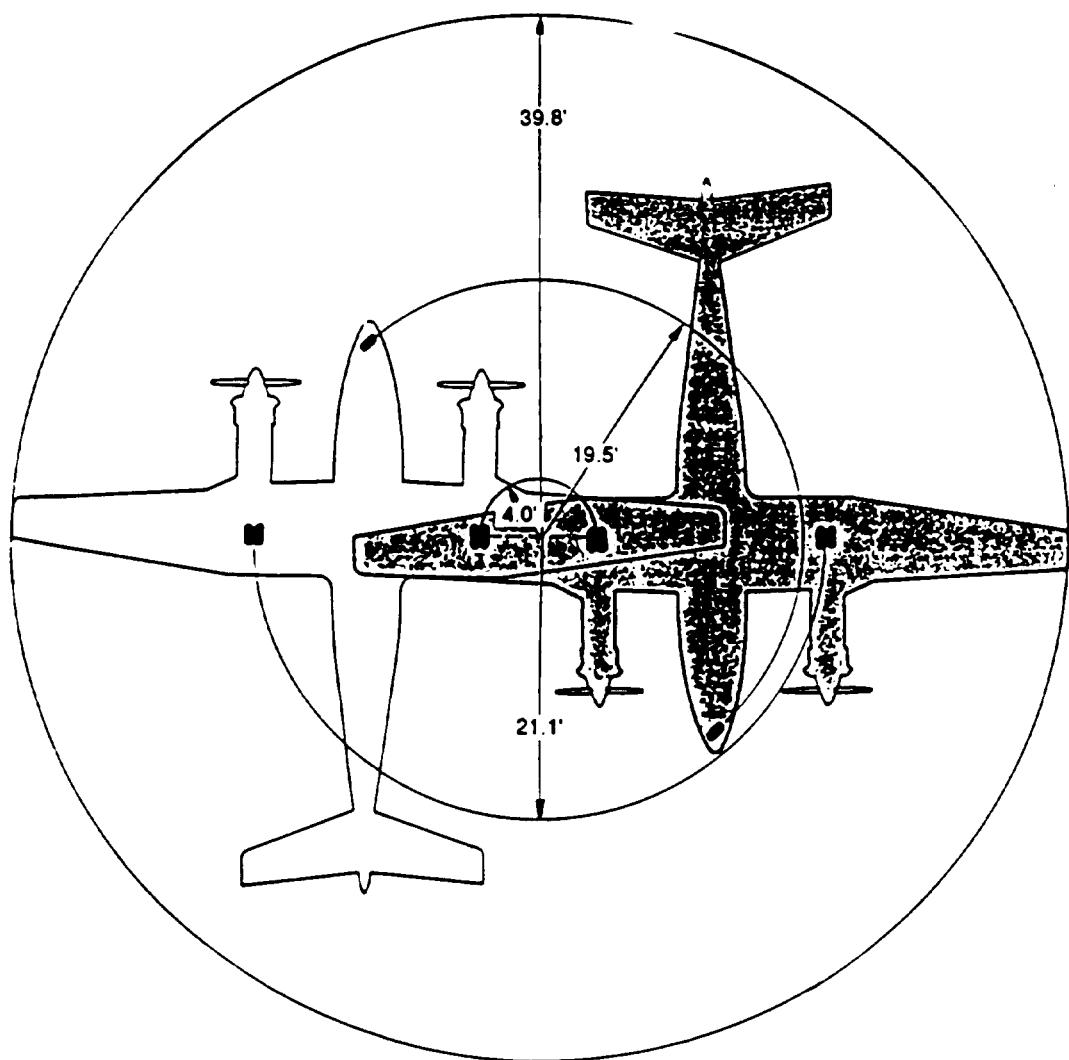


Figure D-33. RC-12D/G/H/K and U-21J, Turning Radii

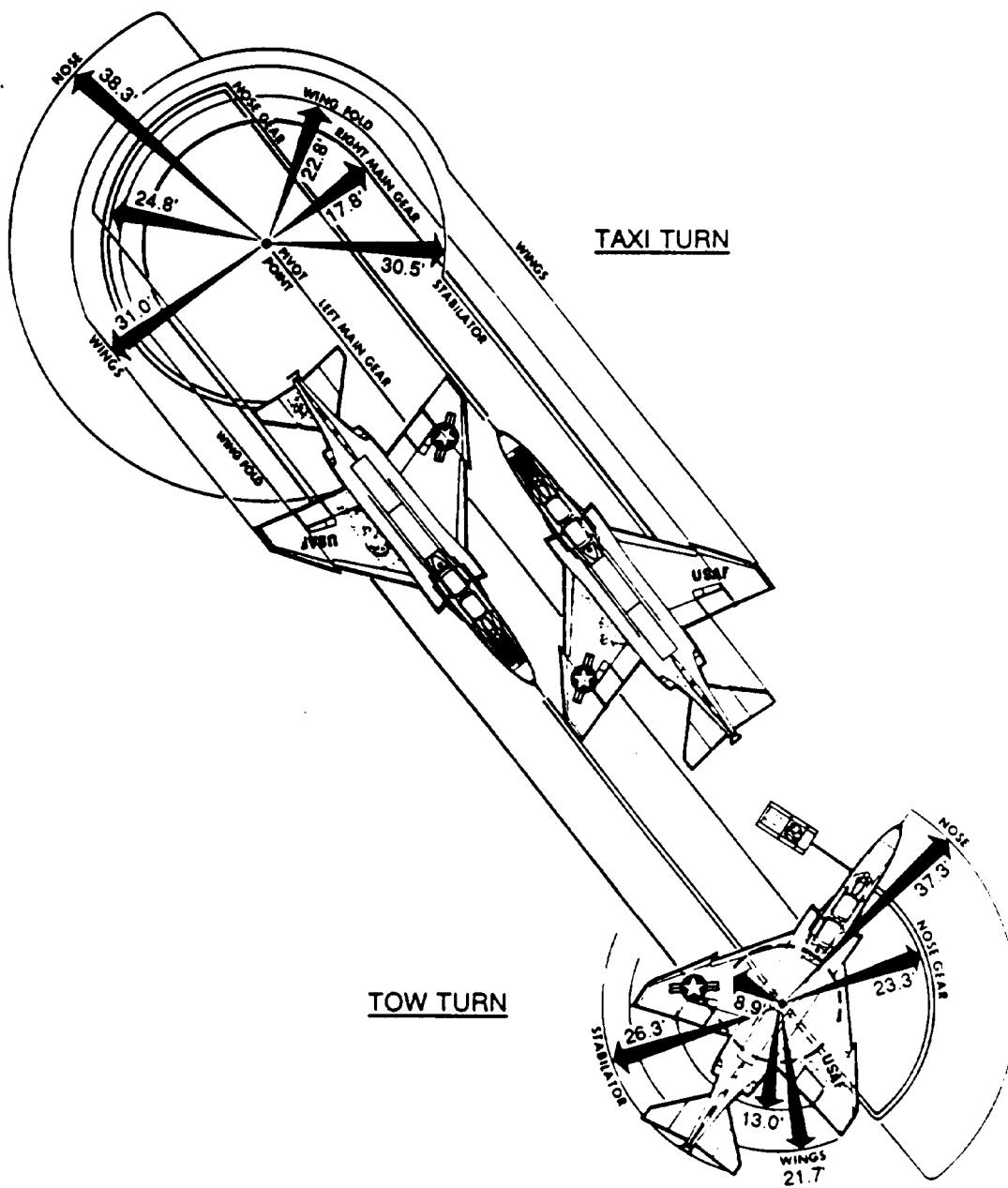
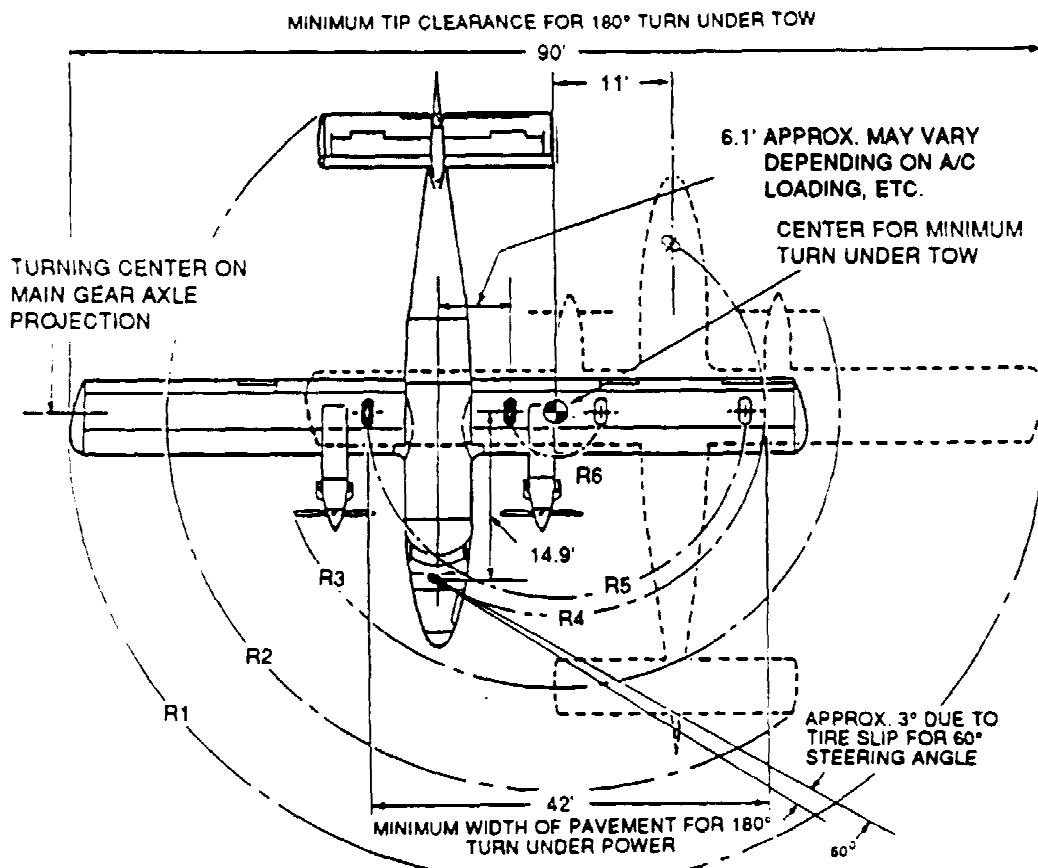


Figure D-34. RF-4C, Taxi and Tow Turn Radii



AIRCRAFT COMPONENT	TURNING RADII UNDER TOW, FEET (PIN REMOVED)	TURNING RADII UNDER POWER, FEET (NOSE WHEEL STEERING)
R1 WING TIP	45	48
R2 ELEVATOR TIP	36	39
R3 PROPELLER TIP	26	29
R4 NOSE WHEEL	19	22
R5 OUTER WHEEL	17	20
R6 INNER WHEEL	4	7

Figure D-35. UV-18, Minimum Turning Radii

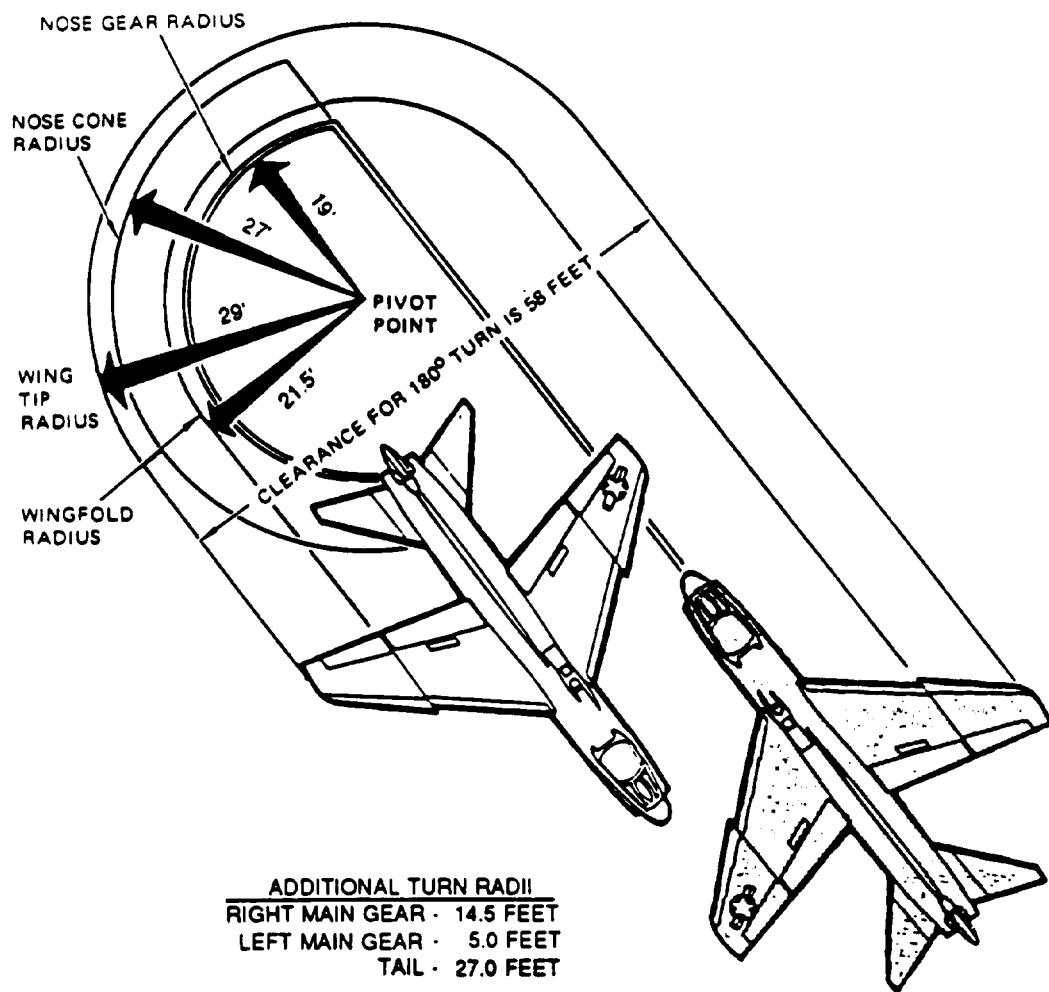


Figure D-36. A-7D/K, Minimum Taxi Turn Radii

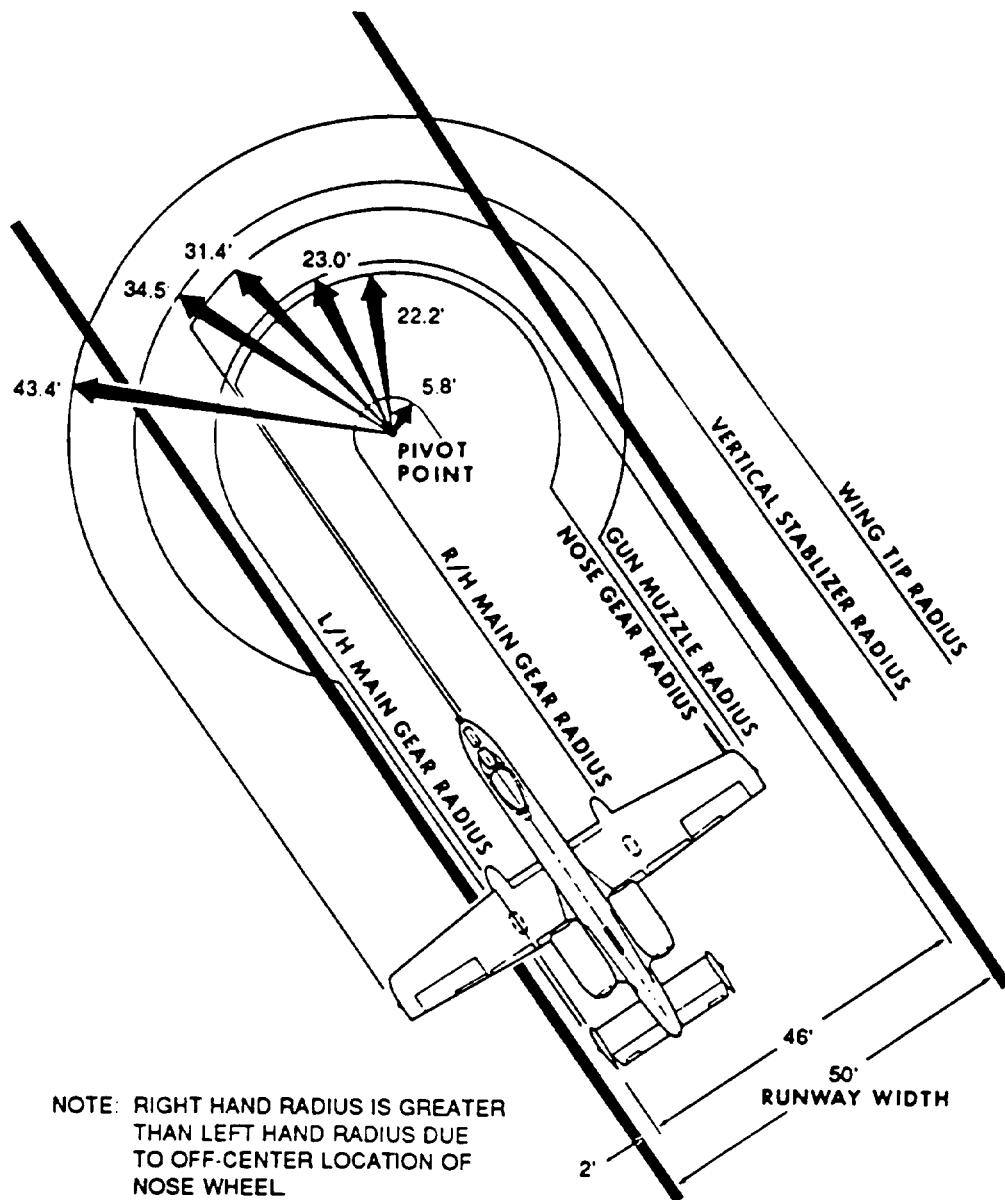
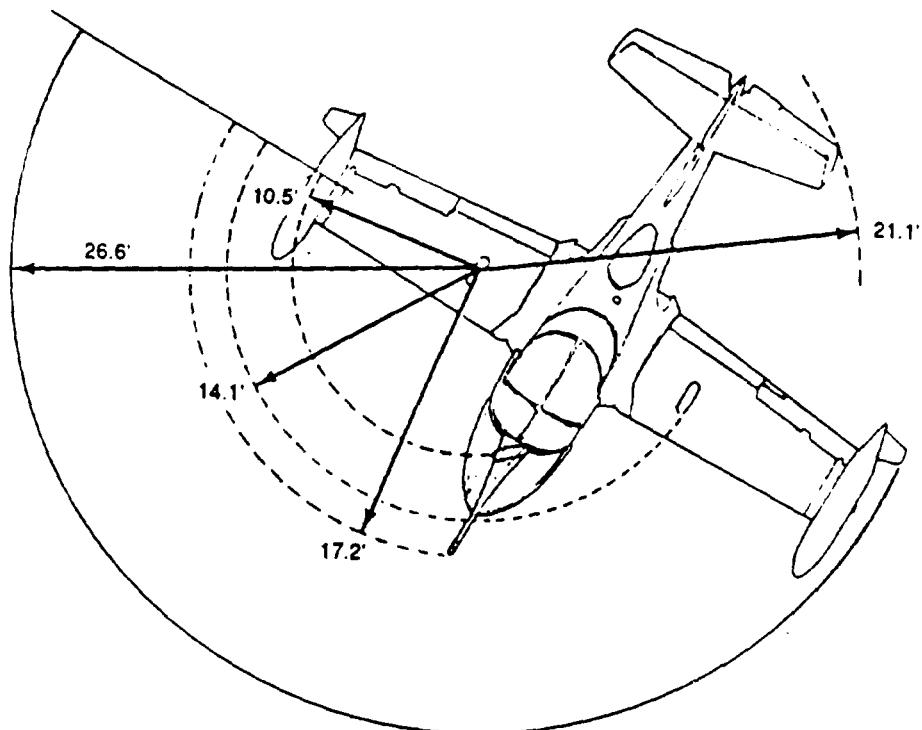
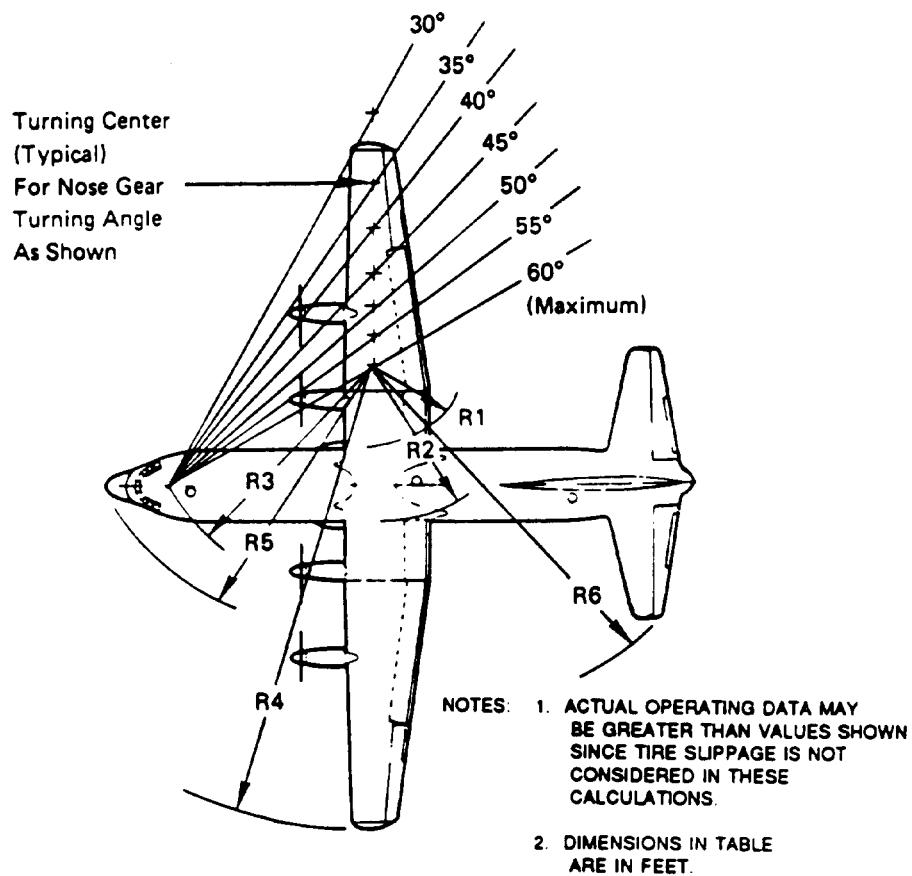


Figure D-37. A-10A, Minimum Taxi Turn Radii



NOTE: TURNING RADII ARE DETERMINED WITH USE  
OF NOSEWHEEL STEERING AND BRAKES.

Figure D-38. A-37B, Minimum Turning Radii



STEERING ANGLE (DEGREES)	W*	R1	R2	R3	R4	R5	R6
	PVT. WIDTH	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	158	63	77	81	136	88	111
35	135	51	65	71	124	78	100
40	108	41	56	63	114	71	92
45	105	33	48	57	107	66	86
50	94	27	41	53	101	62	81
55	85	21	35	50	95	59	77
60 (MAXIMUM)	77	16	30	47	90	57	74

\*W = MINIMUM PAVEMENT WIDTH FOR 180° TURN.

Figure D-39. AC-130A/H/U, Turning Radii - No Tire Slippage

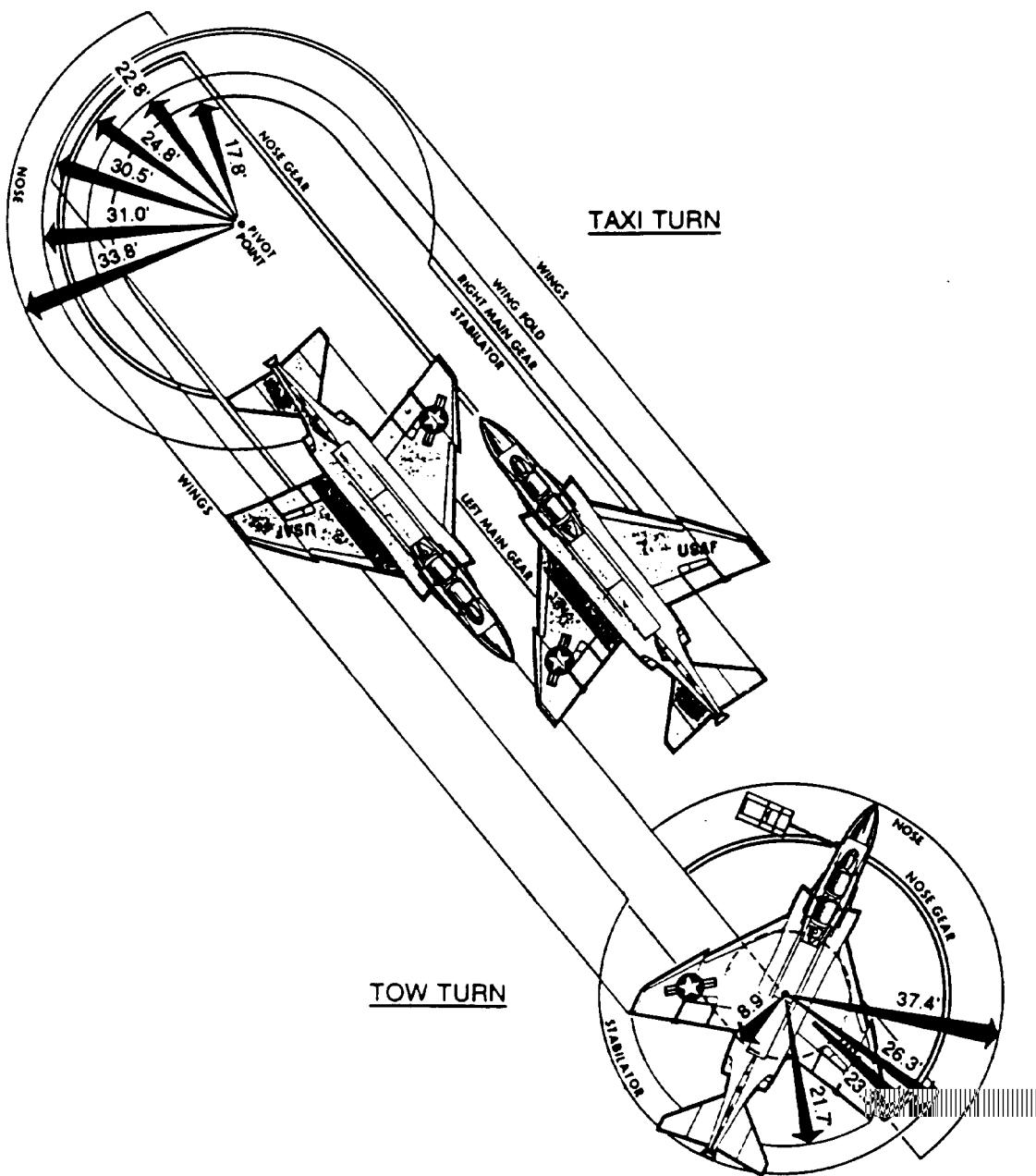


Figure D-40. F-4C, Taxi and Tow Turn Radii